

METHOD FOR USING BASE STATION POWER MEASUREMENTS TO DETECT PO- SITION OF MOBILE STATIONS

Abstract

A method of using power measurements from base stations to calculate position of a mobile station. The method includes providing position coordinates for a plurality of base stations in a mobile phone network, measuring Received Signal Strength Indicator (RSSI) levels of nearby base stations with a mobile station, identifying three base stations for which the mobile station measures strongest RSSI levels, the mobile station receiving the position coordinates of the three identified base stations, calculating a curved path of possible positions of the mobile station for each of the three identified base stations according to the measured RSSI levels of each of the three identified base stations, and calculating the position of the mobile station based on the position coordinates of the three identified base stations and the three curved paths of possible positions of the mobile station.